

MONELATA COMPLETUS, A NEW SPECIES OF DIAPRIIDAE (HYMENOPTERA : PROCTOTRUPOIDEA) FROM INDIA¹

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(With four text-figures)

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A new species of Diapriidae, namely *Monelata completus* is described from India.

INTRODUCTION

Proctotrupeoidea represent one of the important superfamilies of parasitic Hymenoptera, but very little work has been done on the systematics of these insects. In the course of our investigation on the Proctotrupeoidea of the Oriental Region (Rajmohana and Narendran 1996), we came across a new species of *Monelata* Foerster from Calicut, which is described below. At present only one species, *Monelata incispennis* Huggert 1982, is known from India as well as from the Oriental Region.

Abbreviations used: AV - Anterior view; ABL - Length of Abdomen; ABW - Width of abdomen; DV - Dorsal view; F1-F11 - Flagellar segments; FWB - Forewing width; FWL - Forewing length; HL - Length of head; HB - Width of head; OD - Ocellar diameter; OOL - Ocellular distance; POL - Postocellar length; TSS - Trans-scutal sulcus; TL - Length of thorax; TW - Width of thorax; T2 - Second abdominal tergite; DZCU - Department of Zoology, University of Calicut; ZSI - Zoological Survey of India, Calicut.

Monelata completus sp. nov.

(Figs. 1-4)

FEMALE: Length = 1.11 mm. Head black; thorax and abdomen deep blackish brown; propodeum and petiole pale brown; eyes black;

wings hyaline; veins deep brown. Antennal pilosity and marginal fringe of wings brownish. Body pubescence and scales on petiole dull white.

Head (Figs. 1-4): HL:HB(DV) = 9:11; HL:HB (AV) = 12:11.2; viewed from above distinctly transverse, smooth, shiny, scattered erect pubescence, ocelli minute, on a slightly elevated area when viewed laterally; OOL:OD:POL = 8:2:3; occiput slightly emarginate; occipital flange narrow; gena not bulging but converging behind eyes to occiput; postgenal cushion distinct, with a lappet-like appearance; eyes globular, not bulging laterally, bare and located much anteriorly, sub-oval, slightly shorter than finely converging gena; viewed laterally higher than long; rather trapezoid, HH:HL = 13.5:12; face and frons very hairy; frontal shelf protruding, antennal insertion slightly above level of vertex; mandible bidentate; malar groove wanting; malar space almost half of shortest width of eye; antenna 13-segmented, last 4 segments gradually enlarged, terminal club segment much enlarged, longer than 3 penultimate segments together, antenna clothed with fine hairs, subequal to length of F2; scape thinner basally and thicker medially; length to thickness ratio of antennal segments from scape to F2 as follows: 31.5:7.87, 12:6, 6.7:3.77, 3.5:3.76; F2 to F7 subequal; proportions of F8 to F11 being 4.2:5.8, 6.5:7.9, 6.6:8.1, 20.9:10.45.

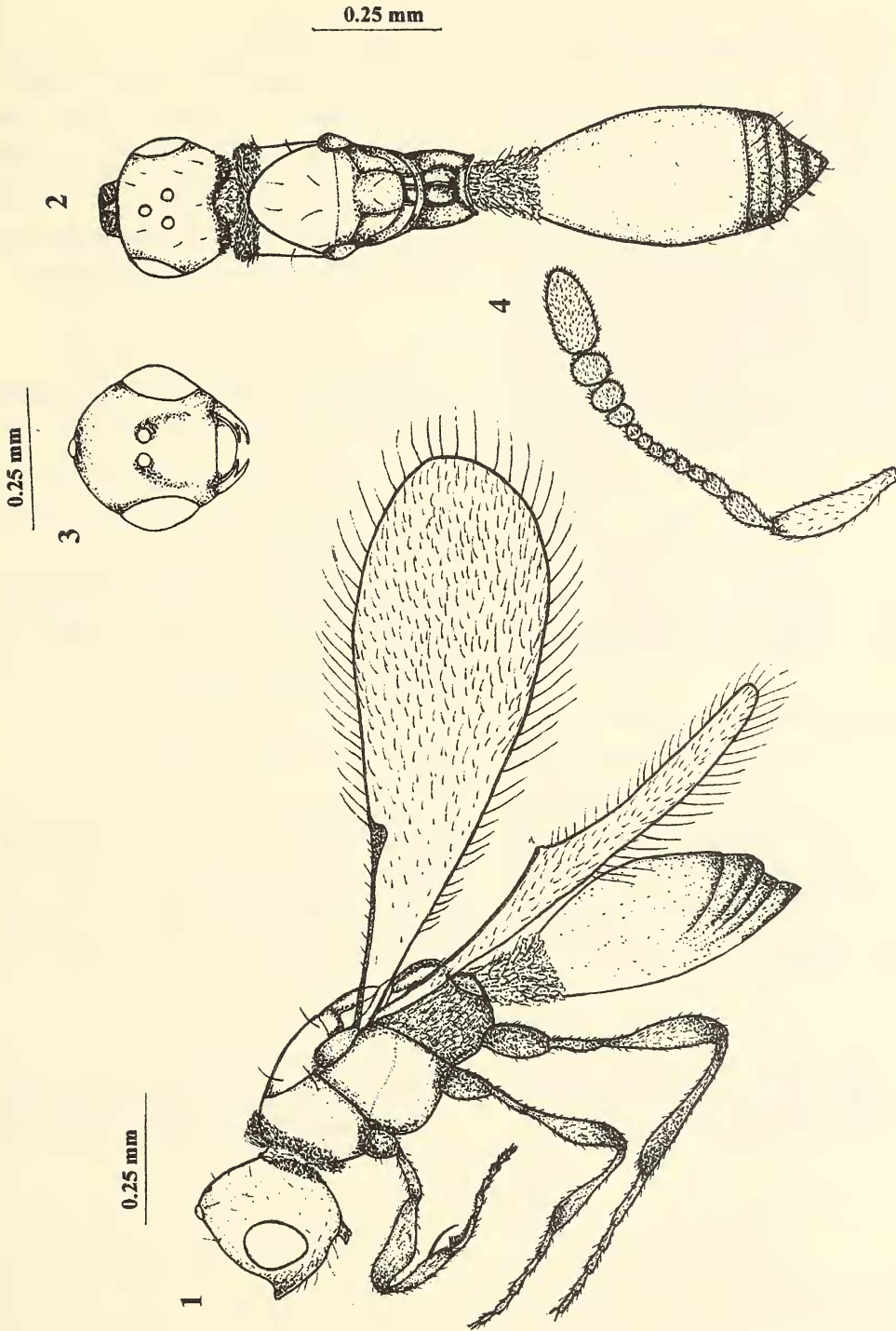
Thorax (Figs. 1-2): TL:TB = 18:10; slightly narrower than head; cervix distinct, smooth, overgrown laterally and basally with thick tufts of hairs and semi-hyaline scales, giving an overall foamy appearance; pronotum visible as a band anterolateral to mesonotum, pronotal collar in a wide circular area; metanotum

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NEW DESCRIPTIONS



Figs: 1-4. *Monelata completus* sp. nov. (female)
1. Body profile; 2. Body dorsal view; 3. Head anterior view; 4. Antenna

smooth with two pairs of erect setae; notauli absent; TSS not very prominent; scutellum a rather broad zone, without any grooves or pits; gently arched with no median carina and basal fovea; shield wide with slightly convex lateral and posterior borders; metanotum with a reduced median and two lateral longitudinal keels; propodeum with a raised median longitudinal keel and with dorsal semi-hyaline zone and lesser raised two lateral ones; posterior border carinate; area between carinae and keel smooth and bare; propleuron and mesopleuron bare and smooth, with a faint impression of sternaulus; metapleural area covered with fine adpressed pubescence; legs normal, fore-tibia without an outwardly-directed spine; tibial spur formula 1.0.0; wings normal; forewing not longer than meso + metasoma combined and without an incised tip; FW L:B = 45:14.5; veins longer than 0.33 of length of wing, sm:total vein length = 7:16.5; distal portion of wing with rather long fringe, 0.33 of wing width; hind wing narrow, with fringe subequal to width of wing.

Abdomen: (Fig 1-2): ABL:ABW = 7.85:3.1 Petiole clothed with semi-hyaline, elongate scales, mixed with setae concealing posterior margin of petiole and basal margin of T2; petiole distinctly longer than broad; sub-parallel and abruptly narrowed to apex, T2 extending to 0.78 of abdomen (petiole + tergites); segments beneath T2 visible only as rings. T2:T3:T4:T5:T6 = 13.3:1:0.5:1:1.

Male: Unknown

Host: Unknown

Holotype: Female: INDIA, Kerala: Tiruvannur: 1.vi.1996, Coll. Mohana. (ZSI).

Paratypes: Two females, one with data same as holotype, the other also with same data except collection date being 16.x.1996. (DZCU).

Etymology: This species name is derived from a prominent character, namely forewing with the distal margin entire and not incised.

DISCUSSION

This species differs from the only known Oriental species, *Monelata incisipennis*, in the following characters:

— Distal margin of forewing entire, without incision. (In *M. incisipennis* distal margin of forewing incised).

— Forewing not longer than meso + metasoma combined. (In *M. incisipennis* forewing longer than meso + metasoma combined).

— Proportions of antennal segments.

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